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CLAIMS

1. The peptides, being either epitopes or potential epitopes for the stated HLA (human leucocyte antigen) class I molecules, conservative variants thereof, and longer peptides containing these sequences which are sub-units of the indicated antigens:

label	Sequence										Position
<u>HLA-A2</u>	1	2	3	4	5	6	7	8	9	10	
tr26	H	L	G	N	V	K	Y	L	V		3
tr29	L	L	M	D	C	S	G	S	I		51
tr39	G	I	A	G	G	L	A	L	L		500
ls10	I	L	Y	I	S	F	Y	F	I		4
ls11	Y	I	S	F	Y	F	I	L	V		6
ls19	G	I	Y	K	E	L	E	D	L		1801
ls23	H	I	F	D	G	D	N	E	I		1883
cp36	Y	L	K	T	I	Q	N	S	L		334
cp37	Y	L	Q	K	I	Q	N	S	L		334
cp38	Y	L	Q	K	I	K	N	S	L		334
cp39	Y	L	N	K	I	Q	N	S	L		334
<u>HLA-B8</u>											
cp43	L	R	K	P	K	H	K	K	L		134
cp44	L	K	K	I	K	N	S	I	S		335
cp45	Q	V	R	I	K	P	G	S	A		358
cp46	A	N	K	P	K	D	G	L	D		366
tr42	A	S	K	N	K	E	K	A	L		107
tr43	K	N	K	E	K	A	L	I	I		109

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label	Sequence										Position
	1	2	3	4	5	6	7	8	9	10	
<u>HLA-B17</u>											
cp48	L	S	V	S	S	F	L	F	V		8
cp55	G	S	A	N	K	P	K	D	E	L	364
cp56	C	S	S	V	F	N	V	V			388
ls36	N	S	E	K	D	E	I	I			28
ls37	G	S	S	N	S	R	N	R	I		42
ls39	V	S	Q	T	N	F	K	S	L		92
ls40	K	S	L	L	R	N	L	G	V		98
ls42	Q	S	D	S	E	Q	E	R	L		179
ls45	R	T	K	A	S	K	E	T	L		1187
ls48	H	T	L	E	T	V	N	I			1742
ls49	I	S	D	V	N	D	F	Q	I		1749
ls50	I	S	K	Y	E	D	E	I			1757
ls51	I	S	A	E	Y	D	D	S	L		1764
ls53	K	S	L	Y	D	E	H	I			1854
ls54	L	S	E	D	I	T	K	Y	F		1898
ls55	T	K	Y	F	M	K	L				1902
tr57	K	T	A	S	C	G	V	W	D	EW	240
tr58	G	T	R	S	R	K	R	E	I	L	260
tr59	S	S	V	Q	K	P	E	E	N	I	311
tr60	D	S	E	K	E	V	P	S	D	V	367
tr61	Y	S	P	L	P	P	K	V	L		415
tr62	E	S	D	N	K	Y	K	I	A		490
tr63	A	T	P	Y	A	G	E	P	A		523
tr64	E	T	L	G	E	E	D	K	D	L	535

these peptides being selected from three *Plasmodium falciparum* antigens, circumsporozoite protein (cp), thrombospondin-related anonymous protein (tr) and liver-stage antigen-1 (ls),

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2. A peptide comprising at least two of the sequences listed in claim 1.

3. A peptide as claimed in claim 1 or claim 2 having an N-terminus or C-terminus carrying a lipid tail.

4. A peptide as claimed in any one of claims 1 to 3, comprising 8-100 amino acid residues.

5. A vaccine comprising at least one peptide according to any one of claims 1 to 4, for immunisation against malaria.

6. Use of *Plasmodium falciparum* gene or protein TRAP (thrombospondin-related anonymous protein) as a cytotoxic T lymphocyte-inducing gene or protein for immunization against malaria.

7. Oligonucleotides which code for the peptides claimed in any one of claims 1 to 4.

8. A vaccine comprising at least one oligonucleotide according to claim 7 for expression *in vivo* for immunization against malaria.

9. A method of inducing primary cytotoxic T lymphocyte responses to a chosen antigen or microorganism, which method comprises incubating lymphocytes *ex vivo* with the chosen antigen or microorganism in the presence of KLH (keyhole limpet haemocyanin) or any other substance which preferentially stimulates a CD45RA⁺ subset of T lymphocyte.

10. A method as claimed in claim 9, wherein IL-7 (interleukin-7) and/or IL-2 (interleukin-2) is also present during incubation.

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11. Use of any one of the peptides:

label	Sequence										Position
HLA-B7	1	2	3	4	5	6	7	8	9	10	
cp6	M	P	N	D	P	N	R	N	V		300
cp6.1	M	P	N	Y	P	N	R	N	V		300
cp6.2	M	P	N	N	P	N	R	N	V		300
ls6	K	P	I	V	Q	Y	D	N	F		1786
sh1	I	P	S	L	A	L	M	L	I		7
sh6	M	P	L	E	T	Q	L	A	I		77
cp21	N	P	D	P	N	A	N	P	N	V	120
tr6	N	P	E	N	P	P	N	P	D	I	348
tr13	I	P	D	S	I	Q	D	S	L		164
tr15	E	P	A	P	F	D	E	T	L		529
tr21	G	P	F	M	K	A	V	C	V		228

and conservative variants thereof and longer peptides containing the sequences which are sub-units of the stated antigen, and of oligonucleotides which code for the said peptides, as a cytotoxic T lymphocyte-inducer for immunization against malaria of individuals possessing a HLA-B7 allele.

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